#### ABSTRACT

A reliable method for measuring a fill level (7) of a fill substance (1) in a container (3) using a fill level measuring device (5) working according to the travel-time principle, wherein, periodically, transmission signals (S) are sent in the direction of the fill substance (1), their echo signals (E) are registered and converted into an echo function (A(t)), at least one echo characteristic of the echo function (A(t)) is determined and, on the basis of the echo characteristics of at least one preceding measurement, a prediction (P) is derived for the echo characteristics to be expected in the case of the current measurement, the echo characteristics of the current measurement are determined taking into consideration the prediction (P), and, on the basis of the echo characteristics, the current fill level (7) is determined.

# Translation of German symbols in the drawings

## Fig. 1:

Change "Hs" to - HD--.

#### Fig. 2:

Change "S" (both occurrences) to --D--; and Change "B" (both occurrences) to --F--.

## Fig. 3:

Change "S" (all occurrences) to --D--; and

Change "B" (all occurrences) to --F--.